

Claims

1. A radio terminal equipment arrangement comprising:
 - a cellular core unit (100) comprising:
 - a control unit (114) for controlling the functions of the cellular core unit (100), the control unit (114) being configured to communicate with a cellular network (120) using a cellular connection, and to receive an incoming connection request from the cellular network (120); and
 - one or more peripheral units (102, 104) being configured to communicate with the cellular core unit (100) using a wireless low power radio frequency (LPRF) connection,
characterized in that
 - the control unit (114) of the cellular core unit (100) is configured to indicate the incoming connection request in one or more peripheral units (102, 104) but not in the cellular core unit (100), when the LPRF connection between the cellular core unit (100) and a peripheral unit (102,104) is available; and
 - the control unit (114) of the cellular core unit (100) is further configured to indicate the incoming connection request in the cellular core unit (100), when the LPRF connection between the cellular core unit (100) and the peripheral unit (102,104) is not available, and to indicate the incoming connection request in the peripheral unit (102,104), when the LPRF connection between the cellular core unit (100) and the peripheral unit (102,104) becomes available.
2. The arrangement of claim 1, *characterized* in that the control unit (114) of the cellular core unit (100) is configured to transfer the indication of the incoming connection request to the peripheral unit (102, 104), when during the indication of the incoming connection request in the cellular core unit (100) the LPRF connection between the cellular core unit (100) and the peripheral unit (102, 104) becomes available.
3. The arrangement of claim 1, *characterized* in that the control unit (114) of the cellular core unit (100) is configured to check the incoming connection indication settings of the peripheral unit (102,104) with which the cellular core unit (100) has last been in LPRF connection and to indicate about the incoming connection request in the cellular core unit (100) according to the checked incoming connection indication settings of the peripheral unit (102,104).

4. The arrangement of claim 1, characterized in that the control unit (114) of the cellular core unit (100) is configured to indicate about the incoming connection request on the cellular core unit (100) by signalling with a sound, a light or a vibration.

5 5. The arrangement of claim 1, characterized in that the control unit (114) of the cellular core unit (100) is configured to indicate the incoming connection request on the cellular core unit (100), when during the indication concerning the incoming connection request to the peripheral unit (102,104) the LPRF connection between the cellular core unit (100) and the 10 peripheral unit (102, 104) is lost.

6. The arrangement of claim 1, characterized in that the control unit (114) of the cellular core unit (100) is configured to:

establish an incoming connection to the peripheral unit (102) in which the incoming connection request has been accepted;

15 receive a connection request from another peripheral unit (104) than the peripheral unit (102) to which the incoming connection has been established;

indicate in the other peripheral unit (104) about transferring the connection to the other peripheral unit (104); and

20 transfer the established incoming connection from the peripheral unit (102) to which the incoming connection has already been established to the other peripheral unit (104) that has requested the connection.

7. The arrangement of claim 1, characterized in that the arrangement further comprises a headset (103,105) connected to the peripheral unit (102, 104) or to the cellular core unit (100) and the control unit (114) is further configured to indicate in the peripheral unit (102, 104) if audios of the incoming connection are to be routed to the headset (103,105).

8. The arrangement of claim 1, characterized in that the arrangement further comprises a headset (105) connected to the cellular core unit (100), the peripheral unit (102, 104) is configured to accept the incoming connection and the control unit (114) is configured to indicate in the peripheral unit (102, 104) when the audios of the incoming connection are routed to the headset (105) connected to the cellular core unit (100).

9. The arrangement of claim 1, characterized in that the 35 LPRF connection between the cellular core unit (100) and the peripheral unit (102,104) is a Bluetooth or a WLAN connection.

10. A method of indicating about an incoming connection in a radio terminal equipment arrangement comprising: a cellular core unit and one or more peripheral units, the cellular core unit communicating with one or more of the peripheral units using a wireless low power radio frequency (LPRF) connection, the method comprising: receiving an incoming connection request from a cellular network by the cellular core unit,

characterized by the method further comprising:

indicating (212) the incoming connection request in one or more of the peripheral units but not in the cellular core unit, when the LPRF connection 10 between the cellular core unit and one or more of the peripheral units is available;

indicating (210) about the incoming connection request in the cellular core unit, when the LPRF connection between the cellular core unit and the peripheral unit is not available; and

15 indicating (212) about the incoming connection request in the peripheral unit, when the LPRF connection between the cellular core unit and the peripheral unit becomes available.

11. The method of claim 10, characterized by transferring the indication of the incoming connection request to the peripheral unit, when 20 during the indication of the incoming connection request in the cellular core unit the LPRF connection between the cellular core unit and the peripheral unit becomes available.

12. The method of claim 10, characterized by checking (208) the incoming connection indication settings of a peripheral unit with 25 which the cellular core unit has last been in connection with and indicating about the incoming connection request in the cellular core unit according to the checked incoming connection indication settings of the peripheral unit.

13. The method of claim 10, characterized by indicating about the incoming connection request in the cellular core unit by signalling 30 with a sound, a light or a vibration.

14. The method of claim 10, characterized by indicating (210) about the incoming connection in the cellular core unit, when during the indication concerning the incoming connection request to the peripheral unit the LPRF connection between the cellular core unit and the peripheral unit is 35 lost.

15. The method of claim 10, characterized by the method further comprising:

establishing (314) an incoming connection to the peripheral unit in which the incoming connection request has been received;

5 receiving (316) a connection request from another peripheral unit;

indicating (318) in the other peripheral unit about transferring the connection to the other peripheral unit; and

transferring (320) the established incoming connection from the peripheral unit to the other peripheral unit.

10 16. The method of claim 10, characterized by the method further comprising indicating (404) in the peripheral unit when audios of the incoming connection are to be routed to a headset connected to the peripheral unit or to the cellular core unit.

15 17. The method of claim 10, characterized by the method further comprising accepting the incoming connection in the peripheral unit and indicating in the peripheral unit, when the audios of the incoming connection are routed to a headset connected to the cellular core unit.

20 18. The method of claim 10, characterized by the LPRF connection between the cellular core unit and the peripheral unit being a Bluetooth or a WLAN connection.